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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/828,300	04/21/2004	Nobuo Fujita	119497	4809
25944 OLIFF & BER	7590 10/02/2007 RRIDGE, PLC	EXAMINER		
P.O. BOX 19928			WILLS, MONIQUE M	
ALEXANDRIA, VA 22320			ART UNIT	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Application No. Applicating No. Application No. Applicating Ant Unit 10/828,300 NOBUO Examiner Art Unit Monique M. Wills 1745 1745 1745						
Examiner Monique M. Wills	:	Application No.	Applicant(s)			
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Paper No(s)/Mail Date <u>11/29/06 & 4/21/04</u> . 6) ☐ Other:	Notice of References Cited (PTO-892) Notice of Draftsperson's Patent Drawing Review (PTO-948) Information Disclosure Statement(s) (PTO/SB/08)	Paper No(s)/M 5) Notice of Infon	ail Date			

DETAILED ACTION

Election/Restrictions

Claims 9-16 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected method of controlling a fuel cell system, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on 7/17/07.

Applicant's election with traverse of Group I in the reply filed on 7/17/07 is acknowledged. The traversal is on the ground(s) all claims are sufficiently related that a thorough search for the subject matter of any one Group of claims would encompass a search and the search can be made without a serious burden. This is not found persuasive because the claims are related as produce and process of use. The produce may be used in a materially different process. The process requires patentable weight to be given to the operation of the fuel cell, resulting in an independent and distinct invention. Because these inventions are independent and distinct, there would be a serious burden on the examiner to search.

The requirement is still deemed proper and is therefore made FINAL.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 2-8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

It is unclear as to whether the claim language is drawn to a produce or a process. Specifically, in claim 2, describes a method of the judgment unit "when the pressure measured by the pressure measurement unit while the discharge valve is being kept open". In claim 3, the discharge valve" can execute a discharge process". Claim 4 describes "a first discharge process mode that repeats a discharge operation". Claim 5 requires "the discharge valve controller repeats the discharge process in a cyclic period". Claim 6 the discharge valve changes states in response to the establishment of the judgment. In claims 7 & 8, the discharge valve controller judges an impurity concentration, then executes the discharge process. It is uncertain as to whether the claims are methods are products. For the purposes of this office action, the examiner assumes a fuel cell system with the components of claim 1 are capable of operation in the manner set forth in claims 2-8.

Application/Control Number: 10/828,300

Art Unit: 1745

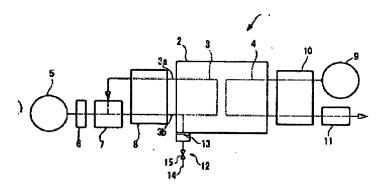
Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mitsuru et al. JP2002-313403.

With respect to claim 1, Mitsuru teaches a fuel cell system comprising a fuel cell2, that generates a power from the inside of a fuel gas flow passage 3. The gas flow passage supplies gas to the fuel cell. See Figure 1.



A water storage part equivalent to the instant water trap. The latching valve 6 changes the supply and a halt to the fuel gas passage. See par. 14

The bulb 15 (discharge valve) opens and closes in the exhaust port 14. See par. 16. A pressure measurement unit 16, 17 detects the pressure of the fuel gas in the exhaust port of the tank. See par. 16. A judgment unit,

Art Unit: 1745

judges whether the water level in the reservoir detected by the sensor is more than a predetermined threshold, if above the threshold, the bulb (discharge valve) is kept open for a predetermined time. See paragraphs 22 & 23. With respect to claims 2-8, the fuel cell system is equivalent to the system set forth in claim 1 therefore, the system is capable of operation in the manner set forth in claims 2-8.

Mitsuru does not expressly disclose that the water trap is disposed in the gas flow passage (claim 1).

However, it would have been obvious to one of ordinary skill in the art at the time the instant invention was made to employ the water trap in the fuel gas passage in order to improve power generation by reducing the amount of water charged to the fuel cell.

Conclusion

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Monique Wills whose telephone number is (571) 272-1309. The Examiner can normally be reached on Monday-Friday from 8:30am to 5:00 pm.

Application/Control Number: 10/828,300

Art Unit: 1745

Page 6

If attempts to reach Examiner by telephone are unsuccessful, the Examiner's supervisor, Patrick Ryan, may be reached at 571-272-1292. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov.Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MW

9/20/07

PATRICK JOSEPH RYAN SUPERVISORY VALENT EXAMINER